

D1
a housing at least partially enclosing the input shaft;

C1
a bearing interposed between the housing and the input shaft and supporting the input shaft for rotation about the axis, the bearing having an inner race engaging the input shaft and an outer race;

C1
the housing having at least one series of axially spaced, annular ribs that at least partially extend around the axis of the input shaft and around the outer race of the bearing, axially adjacent annular ribs being separated by an annular groove; and

C1
a gasket made of resilient material interposed between the outer race of the bearing and the ribs, the gasket comprising a tubular member encircling the outer race of the bearing, the gasket having a cylindrical inner surface and an outer surface, the inner surface engaging the outer race of the bearing, and the outer surface engaging the ribs, the gasket having portions interdigitated with the ribs to resist relative axial movement between the gasket and the housing,

C2
said axially adjacent annular ribs and said portions of the resilient material of said gasket interdigitated with said axially adjacent annular ribs comprising means for preventing said gasket from walk out from said housing.

Add the following claims:

C2
15. The vehicle steering column according to claim 1, further comprising:

a lower steering column member connected to the

input shaft via a universal joint, the lower steering column member being for connecting to steerable wheels of a vehicle; and

D5
the housing including a flange portion for connecting to the lower steering column member, the input shaft tilting relative to the lower steering column member via the housing about another axis upon tilting the steering wheel.

C2
16. A vehicle steering column comprising:

an axially extending steering input shaft for connecting to a vehicle steering wheel, the input shaft being rotatable about an axis upon rotation of the steering wheel;

a housing having a cylindrical portion at least partially enclosing the input shaft and having inner and outer surfaces and first and second axially spaced apart ring shaped cavities that extend radially into the inner surface of the cylindrical portion of the housing, the first and second ring shaped cavities being spaced apart by a ring shaped projection of said cylindrical portion of the housing;

first and second bearings interposed between the housing and the input shaft in the first and second cavities, respectively, and supporting the input shaft for rotation about the axis, each of the first and second bearings having an inner race engaging the input shaft and an outer race;

each of the first and second cavities having a series of annular ribs that at least partially extend around the axis of the input shaft and around the outer race of the

bearing in the respective first and second cavities, axially adjacent annular ribs being separated by an annular groove; and

DK
C2
cont

first and second gaskets made of resilient material in each of the first and second cavities and interposed between the outer race of the bearing and the ribs, each of the first and second gaskets comprising a tubular member encircling the outer race of the bearing, the resilient material of each of the gaskets having a cylindrical inner surface and an outer surface, the cylindrical inner surface of the resilient material of each gasket engaging the outer race of the bearing, and the outer surface of the resilient material of each gasket engaging the ribs, the resilient material of each gasket having portions interdigitated with the ribs of each of the first and second cavities to resist relative axial movement between the resilient material of each respective gasket and the housing;

said axially adjacent annular ribs and said portions of the resilient material of each gasket interdigitated with said axially adjacent annular ribs comprising means for preventing said first and second gaskets from walk out from said first and second cavities.

17. The vehicle steering column of claim 16 further being defined by:

each rib in the series of ribs having a uniform width.

18. The vehicle steering column of claim 17 further being defined by:

each rib in the series of ribs having a width in the range of 0.068 inches to 0.078 inches.

19. The vehicle steering column of claim 16 further being defined by:

each rib in the series of ribs having a uniform height.

C2
cont

20. The vehicle steering column of claim 19 further being defined by:

each rib in the series of ribs having a height in the range of 0.025 inches to 0.035 inches.

21. The vehicle steering column of claim 16 further being defined by:

each rib having a peak, each peak being flat and having an axial length in the range of 0.012 to 0.022 inches.

22. The vehicle steering column of claim 16 further being defined by:

each annular groove having a valley, the valley being flat and forming a bottom surface of a cavity, the valley having an axial length in the range of 0.012 to 0.022 inches.

23. The vehicle steering column of claim 16 further being defined by:

each rib of the series of ribs having side surfaces that extend from the bottom surface at an angle of approximately 57 degrees.

D/J
C2X
24. The vehicle steering column of claim 16 wherein the bearing is secured against axial movement relative to the input shaft.

25. The vehicle steering column of claim 16 wherein:

each rib in the series of ribs has a width and a height, the width being in the range of 0.068 inches to 0.078 inches, the height being in the range of 0.025 inches to 0.035 inches, each rib having a flat peak with an axial length in the range of 0.012 inches to 0.022 inches;

each annular groove having a flat valley with an axial length in the range of 0.012 inches to 0.022 inches; and

each rib of the series of ribs having side surfaces that extend from the bottom surface at an angle of approximately 57 degrees.

26. The vehicle steering column according to claim 16, further comprising:

D/J
a lower steering column member connected to the input shaft via a universal joint, the lower steering column member being for connecting to steerable wheels of a vehicle; and

Serial No. 09/684,729

D105
input shaft portion of the housing, the input shaft being connected to the housing including a flange portion for connecting to the lower steering column member, the input shaft tilting relative to the lower steering column member via the housing about another axis upon tilting the steering wheel.

C2
cont